

## 16294100 WAIHAOLE STREAM ABOVE KAMEHAMEHA HIGHWAY

LOCATION.--Lat 21°29'05", long 157°50'57", Old Hawaiian Datum, Hydrologic Unit 20060000, on left bank 300 ft upstream from Kamehameha Highway, 0.4 miles southwest of Waiahole Elementary School, 1.8 miles northwest of Kahaluu Elementary School.

DRAINAGE AREA.--3.76 mi<sup>2</sup>.

PERIOD OF RECORD.--Miscellaneous streamflow measurements 1988-1990, 1995. August 2001 to current year. Unpublished record from Aug-Sept 2001 available at USGS Hawaii District Office.

GAGE.--Water-stage recorder. Elevation of gage is 14 ft above mean sea level (from NGS benchmark F16).

REMARKS.--Records computed by H.A. Jeppesen. Records fair. Waiahole Ditch diverts ground water from tunnels upstream of station. Beginning early December 1994, Waiahole Ditch began releasing water into Waiahole Stream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,980 ft<sup>3</sup>/s May 6, 2002, gage height, 13.52 ft; minimum daily discharge, 17 ft<sup>3</sup>/s, July 8-11, 16-17, Nov. 11-13, 2003.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 499 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Oct 26	2030	*2,240	*10.72	Feb 2	0915	556	7.81
Oct 31	1830	1,200	8.87	Feb 12	1330	1,540	9.47
Jan 2	0030	1,640	9.65	Jul 12	1000	794	8.18
Jan 29	1445	780	8.16	Sep 23	1815	1,350	9.13

Minimum daily discharge, 22 ft<sup>3</sup>/s, on many days.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	57	47	52	50	42	41	34	26	23	24	29
2	44	48	47	122	82	41	42	34	23	23	e24	27
3	42	47	46	48	54	40	41	32	24	27	e24	26
4	44	55	46	45	138	39	38	32	24	27	e24	28
5	42	67	45	45	57	40	38	31	26	24	23	27
6	42	66	46	44	52	40	39	31	26	23	23	24
7	43	67	46	44	50	37	39	31	26	22	25	23
8	42	52	46	43	49	45	41	34	24	23	23	23
9	42	49	49	60	49	66	40	33	23	25	25	24
10	41	48	46	45	48	43	40	27	24	28	23	25
11	42	47	45	43	127	40	37	26	23	28	22	28
12	45	46	45	43	188	48	33	27	26	69	23	25
13	43	46	45	43	61	43	33	28	26	28	23	26
14	42	79	44	44	53	41	34	29	25	24	25	33
15	41	57	39	44	51	41	34	29	25	24	23	42
16	40	67	40	44	49	38	37	29	26	25	22	42
17	40	63	44	52	48	36	37	28	25	27	22	35
18	40	54	44	52	46	36	34	29	22	24	22	29
19	40	51	44	46	45	37	31	37	27	22	23	25
20	40	49	42	45	44	40	31	30	29	22	25	25
21	40	48	42	44	44	37	31	67	30	22	27	26
22	40	47	53	44	43	35	31	44	25	23	24	25
23	40	66	45	44	44	35	31	34	28	24	23	198
24	49	49	45	44	46	37	33	31	27	27	23	51
25	47	49	45	64	42	41	33	29	25	24	25	37
26	180	47	44	45	44	47	31	28	26	23	23	34
27	83	48	51	44	44	43	32	27	25	22	23	30
28	63	56	47	42	43	40	35	28	23	24	26	29
29	56	55	43	75	---	59	33	29	24	23	24	29
30	69	46	41	50	---	47	32	30	23	22	23	36
31	129	---	43	48	---	43	---	29	---	25	23	---
TOTAL	1,633	1,626	1,395	1,548	1,691	1,297	1,062	987	756	797	732	1,061
MEAN	52.7	54.2	45.0	49.9	60.4	41.8	35.4	31.8	25.2	25.7	23.6	35.4
MAX	180	79	53	122	188	66	42	67	30	69	27	198
MIN	40	46	39	42	42	35	31	26	22	22	22	23
AC-FT	3,240	3,230	2,770	3,070	3,350	2,570	2,110	1,960	1,500	1,580	1,450	2,100

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2005, BY WATER YEAR (WY)

	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005	2001	2002	2003	2004	2005
MEAN	35.5	44.7	49.0	50.3	51.8	46.6	41.0	53.7	34.4	33.0	37.8	37.1			
MAX	52.7	56.7	79.9	62.7	64.2	62.3	52.5	104	46.0	42.6	67.9	44.8			
(WY)	(2005)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2002)	(2004)	(2002)	(2004)	(2004)			
MIN	24.5	31.0	32.4	34.0	36.2	26.1	33.5	22.2	21.4	22.1	20.5	32.4			
(WY)	(2004)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)			

## 16294100 WAI AHOLE STREAM ABOVE KAMEHAMEHA HIGHWAY—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2001 - 2005	
ANNUAL TOTAL	19,848		14,585			
ANNUAL MEAN	54.2		40.0		42.9	
HIGHEST ANNUAL MEAN					55.0 2004	
LOWEST ANNUAL MEAN					28.9 2003	
HIGHEST DAILY MEAN	531	Aug 4	198	Sep 23	1,150	May 6, 2002
LOWEST DAILY MEAN	34	Jul 28	22	Jun 18	17	Jul 8, 2003
ANNUAL SEVEN-DAY MINIMUM	38	Jul 22	23	Aug 11	18	Nov 10, 2003
ANNUAL RUNOFF (AC-FT)	39,370		28,930		31,060	
10 PERCENT EXCEEDS	64		53		54	
50 PERCENT EXCEEDS	47		40		39	
90 PERCENT EXCEEDS	42		23		22	

e Estimated